ABSTRACT

An electric power controller for vehicle comprises an overheat detector, a voltage detector, a voltage converter, a switching unit, and a controller. The overheat detector detects whether a power line supplying power from a vehicle battery to vehicle load is overheated. The voltage detector detects a voltage of the vehicle battery. The voltage converter converts power from the vehicle battery into a proper voltage and outputs a switching control signal reflecting the proper voltage. The switching unit performs ON/OFF switching operations based on the switching control signal to control power from the vehicle battery to the vehicle load. The controller receives an overheat signal from the overheat detector and the voltage from the voltage detector, determines whether there is an abnormal current, and outputs a switching control signal, corresponding to a change of the voltage, to the switching unit.